

1. (Currently Amended) A method for affecting thermoacoustic oscillations in a combustion system ~~(5) comprising~~ having at least one burner ~~(6)~~ and at least one combustor ~~(7)~~, in which a gas flow forming in the region of the burner ~~(6)~~ is excited acoustically, ~~and/or~~ in which modulated injection of fuel is carried out, or both, the method comprising:

~~characterized in that~~ coordinating the acoustic excitations of the gas flow, ~~and/or~~ the modulated injections of the fuel, or both, are coordinated in order to affect at least two different interference frequencies of the thermoacoustic oscillations.

2. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ comprising:

affecting two interference frequencies ~~are affected exclusively by means of~~ acoustic excitation of the gas flow with different phases, ~~and/or~~ amplitudes, or both.

3. (Currently Amended) The method as claimed in claim 2, ~~characterized in that~~ comprising:

producing the acoustic excitation of the gas flow ~~is produced~~ with at least one acoustic source ~~(3)~~, the production of said producing including producing acoustic excitations of different phases, ~~and/or~~ amplitudes, or both, being carried out either via a common acoustic source or via at least two separate acoustic sources ~~(3, 3')~~.

4. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ comprising:

affecting two interference frequencies ~~are affected exclusively by means of~~ modulated injections of ~~the~~ fuel with different injection times, ~~and/or~~ different injection quantities, or both.

5. (Currently Amended) The method as claimed in claim 4, ~~characterized in that~~ the comprising:

producing modulated injections of the fuel ~~are produced~~ with at least one control valve ~~(4)~~, the production of modulated injections with different injection times, ~~and/or~~ different

injection quantities, or both, being carried out ~~either~~ via a common control valve or via at least two separate control valves ~~(4, 4')~~.

6. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ comprising:
_____ affecting one interference frequency is affected by means of acoustic excitation of the gas flow; and
_____ affecting another interference frequency is affected by means of modulated injection of the fuel.

7. (Currently Amended) A device for affecting thermoacoustic oscillations in a combustion system ~~(5)~~ comprising:
_____ at least one burner (6) and one combustor (7), in which, in the region of the burner (6) there is arranged;
_____ at least one acoustic source (3, 3') for producing configured and arranged to produce acoustic excitation of a gas flow forming in the region of the burner (6), and/or in which the burner (6) has having at least one fuel supply device with at least one control valve (4, 4') for producing modulated injection of a fuel, characterized in that or both;
_____ a control system (2) is provided which drives driving the at least one acoustic source, (3, 3') and/or the at least one control valve, (4, 4') or both, to affect at least two different interference frequencies of the thermoacoustic oscillations.

8. (Currently Amended) The device as claimed in claim 7, ~~characterized in that~~ wherein the control system (2) has a control path (8, 9) for each interference frequency to be affected, which, on the an input side, has a frequency band-pass filter (10, 10') tuned to the respective interference frequency and, on the an output side, is connected to the respective acoustic source (3, 3') or to the respective control valve (4, 4'), each control path (8, 9) containing a time delay element (11, 11').